

Pub A1

WHAT IS CLAIMED IS:

1. An electronic switching device for a universal serial bus (USB) interface, comprising a trigger signal generator, a control signal generator, and a connector, wherein:

5 the trigger signal generator having an output to be connected with an input of the control signal generator, and having a switch to output a trigger signal to the control signal generator when a user enables the switch;

the control signal generator having an input to be connected
10 with an output of the trigger signal generator, and having an output to be connected with an input of the connector, for receiving the trigger signal outputted from the trigger signal generator, and processing the trigger signal, then outputting a control signal to the connector;

the connector having an input to be connected with each
15 universal serial bus (USB) interface of at least two electronic devices, and having an output to be connected with a universal serial bus (USB) interface of another electronic device, when the connector receives the control signal outputted from the control signal generator, the connector will connect related universal serial bus
20 (USB) interfaces according to the control signal.

2. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the trigger signal generator comprising a resistor, a capacitor, and a switch, the resistor and the capacitor are serially connected between a power supply and a
25 ground, one end of the switch is connected to the ground, the other end of the switch is connected to where the resistor and the capacitor are connected, enabling the switch to generate a pulse signal to be

used as the trigger signal.

3. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the control signal generator comprising a D FLIP-FLOP, having a clock signal input terminal to

5 be used as the input of the control signal generator, and having a reverse data output terminal to be connected with a data input terminal thereof, a positive data output terminal thereof is used as the output of the control signal generator.

4. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the connector comprising a multiplexor, an input and an output of the multiplexor are connected respectively with each universal serial bus (USB) interface of different electronic devices, and a selecting signal input terminal thereof is connected with the output of the control signal generator.

5. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the control signal generator comprising at least two D FLIP-FLOPs, a clock signal input terminal of the first D FLIP-FLOP is connected with the output of the trigger signal generator, while a reverse data output terminal is connected with its data input terminal; a clock signal input terminal of the second D FLIP-FLOP is connected with the reverse data output terminal of the first D FLIP-FLOP, while a reverse data output terminal of the second D FLIP-FLOP is connected with its data input terminal; and so on; and the positive data output terminals of all the D FLIP-FLOPs are used as the control signals for the connector.

6. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the connector comprising at

Sub A1
least two identical multiplexors to be parallely connected for decreasing the internal resistance in the connector.

7. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein a delay signal generator is
- 5 provided between the trigger signal generator and the connector, having an input to be connected with the output of the trigger signal generator, and having an output to be connected with an enable terminal of the connector.
8. An electronic switching device for a universal serial bus (USB) interface according to claim 7, wherein the delay signal generator
- 10 comprising two resistors, a capacitor and a diode, having its input to be connected with the output of the trigger signal generator, and having its output to be connected with the enable terminal of the connector, the first resistor and the capacitor are serially connected
- 15 between a power supply and a ground, a point where the first resistor and the capacitor are connected is connected with a positive terminal of the diode and the enable terminal of the connector, while a negative terminal of the diode is connected with one end of the second resistor, the other end of the second resistor is the input
- 20 terminal of the delay signal generator.
9. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the control signal generator is connected with a display for showing the current connections of the universal serial bus (USB) interfaces.
- 25 10. An electronic switching device for a universal serial bus (USB) interface according to claim 9, wherein the display comprising light emitting diodes.

11. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the control signal generator is connected with an enable signal generator so that the connections between different USB interfaces are the same whenever the power supply begins conducting.

12. An electronic switching device for a universal serial bus (USB) interface according to claim 11, wherein the enable signal generator comprising a resistor and a capacitor, the resistor and the capacitor are serially connected between the power supply and the ground, a point where the resistor and the capacitor are connected is used as an output to be connected with a reset terminal of the control signal generator.

13. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein the power supply used by the electronic switching device for a universal serial bus (USB) interface is the power supply used by the connected universal serial bus (USB) interface.

14. An electronic switching device for a universal serial bus (USB) interface according to claim 1, wherein a diode is connected between the power supply and each USB interface to avoid the reverse current flowing from USB interface to the power supply.